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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
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 08/484,928
 06/07/95
 MICHELSON
 G
 P-12509

 EXAMINER

MARTIN & FERRARO,LLP 14500 AVION PARKWAY SUITE 300 CHANTILLY VA 20151-1101 FART-UNIT PAPER NUMBER

DATE MAILED:

06/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

	Application No.	Applicant(s)	K. Michel	(5-1
Office Action Summary	Examiner	lucy	Group Art Unit	<u>52~</u>
•	Michael 1	mous	3764	
The MAIL INC DATE of this communication opposes	on the sever sheet h	anaath tha a		ddmoo
—The MAILING DATE of this communication appears	on the cover sneet b	eneath the co	orrespondence ac	iaress
Period for Reply	3			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO DF THIS COMMUNICATION.	EXPIRE	MONTH(S) FROM THE MAIL	LING DATE
 Extensions of time may be available under the provisions of 37 CFR 1.15 from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply. If NO period for reply is specified above, such period shall, by default, expecified above. Failure to reply within the set or extended period for reply will, by statute. 	within the statutory minimpire SIX (6) MONTHS from	um of thirty (30) n the mailing dat	days will be considere	ed timely.
Status				
☐ Responsive to communication(s) filed on				•
☐ This action is FINAL.				•
☐ Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935 (the merits is clos	sed in
Disposition of Claims		o	136-172	
Disposition of Claims $\frac{1-26,28-51,53-75,77-82,8}{2}$	5-91,98,101-1	ا is/are ا	pending in the app	lication.
Of the above claim(s)			withdrawn from cor	
□ Claim(s)		is/are	allowed.	
Claim(s) 1-24, 26, 28-50, 53-74, 77-82, 85-86	98,10/-122,124	-129 131-13	5 4~ 4 /37-	172
Claim(s) 1-24, 26, 28-50, 53-74, 77-82, 85-86 Claim(s) 25, 51, 75, 123, 130 and 1	36	is/are	nhiected to	
□ Claim(s)			bject to restriction	
		require	•	or election
Application Papers				
☐ See the attached Notice of Draftsperson's Patent Drawing I	·	.		
☐ The proposed drawing correction, filed on	is approved	⊔ disapprove	a.	
☐ The drawing(s) filed on is/are objected	to by the Examiner.			
☐ The specification is objected to by the Examiner.				
☐ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. § 119 (a)-(d)				
 □ Acknowledgment is made of a claim for foreign priority unde □ All □ Some* □ None of the CERTIFIED copies of the □ received. 	priority documents ha	ave been		
 □ received in Application No. (Series Code/Serial Number) □ received in this national stage application from the International 				
*Certified copies not received:				
Attachment(s)				
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) 🗆 Ir	nterview Sumr	nary, PTO-413	
☐ Notice of Reference(s) Cited, PTO-892		lotice of Inform	nal Patent Applicat	ion, PTO-152
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948		Other		
Office A	ction Summary			

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 5-7, 9-10, 17-22, 26-32, 34-35, 42-48, 53-57, 59-60, 67-72, 77-82, 89-94, 98-105, 107-108, 115-120, 124-126 and 131-132, 137,-138, 145 and 158-167 are rejected under 35 U.S.C. 103 as being obvious over Kuslich '638 in view of Kuslish '638.

Kuslish discloses in figure 2 a spinal implant, substantially as claimed. Kuslish teaches in fugure 15 a frustonical shaped implant. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the implant as disclosed by Kuslich could be fabricated in a frustoconical shape in order to allow the tapered leading end to be easily inserted into the vertebrae.

3. Claims 8, 13, 33, 38, 58, 63, 80, 85, 106, 111, 128, 134, 141, 142, 148 and 168 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuslich '638 in view of Kuslich '638 along with Ray.

Kuslich discloses in figure 2 a spinal implant, substantially as claimed. Kuslich teaches in figure 15 a frustoconical shaped implant. Ray '260 teaches a spinal implant comprising a

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bioabsorbable material and a bone engaging means that is mesh-like. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the implant as disclosed by Kuslich could be fabricated of bioabsorbable material and with a bone engaging means as taught by Ray. The bioabsorbable material would allow the implant to absorb into the vertebrae. The mesh material would enhance bone growth on the outer surface of the implant.

4. Claims 11, 14-16, 23-24, 36, 39-41, 49-50, 61, 64-66, 73-74, 83-84, 86-88, 95-96, 109, 112-114, 121-122, 127, 129, 133, 135, 139-140, 143-144, 146-147, 149-151, 153-157 and 169-172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuslich '638 in view of Kuslich '63, along with Brantigan '915.

Kuslich discloses in figure 2 a spinal implant, substantially as claimed. Kuslich teaches in figure 15 a frustoconical spinal implant, substantially as claimed. Brantigan '915 teaches a spinal implant comprising a bone engaging means that includes post (32c,32d), surface roughening that include knurling (fig. 6) and wells (the spaces between the post). It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the spinal implant as disclosed by Kuslich could be fabricated with wells, posts, knurling or roughenings as taught by Brantigan in order to use these elements to enhance bone growth onto and inside of the impant.

5. Claims 25, 51, 75, 123, 130 and 136 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication should be directed to Michael Brown at telephone number (703) 308-2682.

Michael G. Brown

M. Brown 5 June 2000

Michael A. Brown Primary Examiner